

REFERENCES

In addition to the U.S., PCT and European patents and patent applications referenced in the present text, the following references, to the extent that they provide exemplary procedural or other details supplementary to those set forth herein, are specifically incorporated herein by reference.

- Abel and Dessein, "The impact of host genetics on susceptibility to human infectious diseases," *Curr. Opin. Immunol.*, 9:509-516, 1997.
- Achord *et al.*, "HIV-1 disease association with HLA-DQ antigens in African Americans and Caucasians," *Pathobiology*, 64:204-208, 1996.
- Ahuja and Murphy, "Molecular piracy of mammalian interleukin-8 receptor type B by herpesvirus saimiri," *J. Biol. Chem.*, 268(28):20691-20694, 1993.
- Ahuja and Murphy, "The CXC chemokines growth-regulated oncogene (GRO) alpha, GRObeta, GROgamma, neutrophil-activating peptide-2, and epithelial cell-derived neutrophil-activating peptide-78 are potent agonists for the type B, but not the type A, human interleukin-8 receptor," *J. Biol. Chem.*, 271(34):20545-20550, 1996.
- Ahuja *et al.*, "Molecular evolution of the human interleukin-8 receptor gene cluster," *Nat. Genet.*, 2(1):31-36, 1992.
- Ahuja *et al.*, "Chemokine receptors and molecular mimicry," *Immunol. Today*, 15(6):281-287, 1994.
- Ahuja *et al.*, "Comparison of the genomic organization and promoter function for human interleukin-8 receptors A and B," *J. Biol. Chem.*, 269(42):26381-26389, 1994a.
- Ahuja *et al.*, "Characterization of the promoters of human IL-8 receptors A and B in myeloid and lymphoid cell lines, and CD34+ peripheral blood hematopoietic progenitor cells," *Mol. Biol. Cell*, 5:122A, 1994b.
- Ahuja *et al.*, "Autocrine activation of hemopoietic progenitor-derived myelo-monocytic cells by IFN-gamma gene transfer," *J. Immunol.*, 156(11):4345-4353, 1996.
- Ahuja *et al.*, "CXC chemokines bind to unique sets of selectivity determinants that can function independently and are broadly distributed on multiple domains of human interleukin-8 receptor B. Determinants of high affinity binding and receptor activation are distinct," *J. Biol. Chem.*, 271(1):225-232, 1996.
- Alkhatib *et al.*, "CC CKR5: a RANTES, MIP-1alpha, MIP-1beta receptor as a fusion cofactor for macrophage-tropic HIV-1," *Science*, 272(5270):1955-1958, 1996.

WO 01/27330

PCT/US00/28158

- Alkhatib *et al.*, "CC chemokine receptor 5-mediated signaling and HIV-1 Co-receptor activity share common structural determinants. Critical residues in the third extracellular loop support HIV-1 fusion," *J. Biol. Chem.*, 272(32):19771-19776, 1997.
- Alkhatib *et al.*, "HIV-1 coreceptor activity of CCR5 and its inhibition by chemokines: independence from G protein signaling and importance of coreceptor downmodulation," *Virology*, 234(2):340-348, 1997.
- Allan *et al.*, *AIDS Res. Hum. Retroviruses*, 6(3):275-285, 1990.
- Allan *et al.*, *J. Virol.*, 65(6):2816-2828, 1991.
- Allan, *NIH Res.*, 4:51-54, 1992.
- Amara *et al.*, "HIV co-receptor downregulation as antiviral principle: SDF-1 $\alpha$ -dependent internalization of the chemokine receptor CXCR4 contributes to inhibition of HIV replication," *J. Exp. Med.*, 186:139-146, 1997.
- Angotti *et al.*, "A polymorphism (G $\rightarrow$ A transition) in the -78 position of the apolipoprotein A-I promoter increases transcription efficiency," *J. Biol. Chem.*, 269(26):17371-17374, 1994.
- Ansari-Lari *et al.*, "The extent of genetic variation in the CCR5 gene," *Nat. Genet.*, 16(3):221-222, 1997.
- Anzala *et al.*, "CCR2-64I allele and genotype association with delayed AIDS progression in African women," University of Nairobi Collaboration for HIV Research, *Lancet*, 351:1632-1633, 1998.
- Asano *et al.*, "Naturally occurring mutations in the human 5-lipoxygenase gene promoter that modify transcription factor binding and reporter gene transcription," *J. Clin. Invest.*, 99(5):1130-1137, 1997.
- Atchison *et al.*, "Multiple extracellular elements of CCR5 and HIV-1 entry: dissociation from response to chemokines," *Science*, 274(5294):1924-1926, 1996.
- Ayoubi and Van De Ven, *FASEB J.*, 10:453-460, 1996.
- Ball *et al.*, *J. Biol. Chem.*, 270:27272-27276, 1995.
- Bamshad, Watkins, Dixon, Jorde, Rao, Naidu, Prasad, Rasanayagam and Hammer, *Nature* 395:651-652, 1998.
- Bellamy and Hill, "Genetic susceptibility to mycobacteria and other infectious pathogens in humans," *Curr. Opin. Immunol.*, 10:483-487, 1998.
- Berger, "HIV entry and tropism: the chemokine receptor connection," *AIDS*, 11:S3-S16, 1997.
- Berger *et al.*, "A new classification for HIV-1," *Nature*, 391:240, 1998.
- Biti R *et al.*, "HIV-1 infection in an individual homozygous for the CCR5 deletion allele," *Nat. Med.*, 3(3):252-253, 1997.

WO 01/27330

PCT/US00/28158

Bjorndal *et al.*, "Co-receptor usage of primary human immunodeficiency virus type 1 isolates varies according to biological phenotype," *J. Virol.*, 71:7478-7487, 1997.

Blanche *et al.*, "Morbidity and mortality in European children vertically infected by HIV- 1," The French Pediatric HIV Infection Study Group and European Collaborative Study. *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 14:442-450, 1997.

Blatt *et al.*, "Total lymphocyte count as a predictor of absolute CD4+ count and CD4+ percentage in HIV-infected persons," *JAMA*, 269:622-626, 1993a.

Blatt *et al.*, "Delayed-type hypersensitivity skin testing predicts progression to AIDS in HIV-infected patients," *Ann. Intern. Med.*, 119:177-184, 1993b.

Blatt *et al.*, "Multivariate models for predicting progression to AIDS and survival in human immunodeficiency virus-infected persons," *J. Infect. Dis.*, 171:837-44, 1995.

Bleul *et al.*, "The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry," *Nature*, 382(6594):829-833, 1996.

Bleul *et al.*, "The HIV coreceptors CXCR4 and CCR5 are differentially expressed and regulated on human T lymphocytes," *Proc. Natl. Acad. Sci. USA*, 94(5):1925-1930, 1997.

Boucher *et al.*, "Phase I evaluation of Zidovudine administered to infants exposed at birth to the human immunodeficiency virus," *J. Pediatrics* 122:137-144, 1993.

Bozon *et al.*, "Comparison of HLA-A antigen typing by serology with two polymerase chain reaction based DNA typing methods: implications for proficiency testing," *Tissue Antigens*, 47:512-518, 1996.

Bozzette *et al.*, "The care of HIV-infected adults in the United States," HIV Cost and Services Utilization Study Consortium, *N. Engl. J. Med.*, 339:1897-1904, 1998.

Brackin *et al.*, "Progression of HIV infection is associated with HLA-DQ antigens in Caucasians and African Americans," *Pathobiology*, 63:22-41, 1995.

Bream *et al.*, *Science*, 284:223, 1999.

Brettle *et al.*, "Progression of HIV: follow-up of Edinburgh injecting drug users with narrow seroconversion intervals in 1983-1985," *Aids*, 10:419-430, 1996.

Brun-Vezinet *et al.*, "Lack of evidence for human or simian T-lymphotropic viruses type III infection in pygmies," *Lancet*, 1:854, 1986.

Buchacz *et al.*, "Genetic and immunological host factors associated with susceptibility to HIV-1 infection," *Aids*, 12:S87-S94, 1998.

Bustin and McKay, "Transcription factors: targets for new designer drugs," *Br. J. Biomed. Sci.*, 51(2):147-157, 1994.

Cairns and D'Souza, "Chemokines and HIV-1 second receptors: the therapeutic connection," *Nat. Med.*, 4:563-568, 1998.

WO 01/27330

PCT/US00/28158

- Cameron *et al.*, "Influence of C4 null genes on infection with human immunodeficiency virus," *Br. Med. J. (Clin. Res. Ed.)*, 296:1627-1628, 1988.
- Cameron *et al.*, "Major histocompatibility complex genes influence the outcome of HIV infection. Ancestral haplotypes with C4 null alleles explain diverse HLA associations," *Hum. Immunol.*, 29:282-295, 1990.
- Carrington *et al.*, "Novel alleles of the chemokine-receptor gene CCR5," *Am. J. Hum. Genet.*, 61(6):1261-1267, 1997.
- Carrington *et al.*, "HLA and HIV-1: heterozygote advantage and B\*35-Cw\*04 disadvantage," *Science*, 283:1748-1752, 1999.
- Carroll *et al.*, "Differential regulation of HIV-1 fusion cofactor expression by CD28 costimulation of CD4+ T cells," *Science*, 276(5310):273-276, 1997.
- Center for Disease Control and Prevention, "Guidelines for the use of antiretroviral agents in pediatric HIV infection," *MMWR Morb. Mortal Wkly Rep.*, 47:1-43, 1998.
- Center for Disease Control and Prevention, "HIV/AIDS Surveillance Report," 10(1), 1998.
- Chen *et al.*, *J. Exp. Med.*, 188(11):2057-2065, 1998.
- Choe *et al.*, "The beta-chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates," *Cell*, 85(7):1135-1148, 1996.
- Cocchi *et al.*, "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells," *Science*, 270(5243):1811-1815, 1995.
- Cohen *et al.*, "Host factors in the pathogenesis of HIV disease," *Immunol. Rev.*, 159:31-48, 1997.
- Combadiere *et al.*, "Cloning and functional expression of a human eosinophil CC chemokine receptor," *J. Biol. Chem.*, 270(28):16491-16494, 1995; Published erratum *J. Biol. Chem.*, 270(50):30235, 1995a.
- Combadiere *et al.*, "Monocyte chemoattractant protein-3 is a functional ligand for CC chemokine receptors 1 and 2B," *J. Biol. Chem.*, 270(50):29671-29675, 1995b.
- Combadiere *et al.*, "Cloning, chromosomal localization, and RNA expression of a human beta chemokine receptor-like gene," *DNA Cell Biol.*, 14(8):673-680, 1995c.
- Combadiere *et al.*, "Cloning and functional expression of CC CKR5, a human monocyte CC chemokine receptor selective for MIP-1(alpha), MIP-1(beta), and RANTES," *J. Leukoc. Biol.*, 60(1):147-152, 1996.
- Connor *et al.*, "Change in coreceptor use correlates with disease progression in HIV-1--infected individuals," *J. Exp. Med.*, 185(4):621-628, 1997.
- Cook *et al.*, "Developmentally regulated mRNAs in 3T3-adipocytes: analysis of transcriptional control," *J. Cell Biol.*, 100(2):514-520, 1985.

WO 01/27330

PCT/US00/28158

Corzo *et al.*, "Advances in HLA genetics," *Exp. Clin. Immunogenet.*, 12:156-170, 1995.

Csink and Henikoff, "Something from nothing: the evolution and utility of satellite repeats," *Trends Genet.*, 14:200-204, 1998.

Cunningham *et al.*, "Comparison of health-related quality of life in clinical trial and nonclinical trial human immunodeficiency virus-infected cohorts," *Med. Care*, 33:AS15-AS25, 1995.

Curnow *et al.*, *Mol. Endocrinol.*, 9:1250-1262, 1995.

Dallinga-Thie *et al.*, "Complex genetic contribution of the Apo AI-CIII-AIV gene cluster to familial combined hyperlipidemia. Identification of different susceptibility haplotypes," *J. Clin. Invest.*, 99(5):953-961, 1997.

Dausset, "Le centre d'etude du polymorphisme humain," *Presse Med.*, 15(36):1801-1802, 1986.

Dausset, Cann, Cohen, Lathrop, Lalouel and White, *Genomics* 6:575-577, 1990.

Dawkins *et al.*, "HIV-1-associated Kaposi's sarcoma in a predominantly black population at an inner city hospital," *South Med. J.*, 91:546-549, 1998.

Dawson *et al.*, "A single amino acid change converts an inhibitory transcription factor into an activator," *J. Biol. Chem.*, 271:11631-11633, 1996.

de Roda Husman *et al.*, "Association between CCR5 genotype and the clinical course of HIV-1 infection," *Ann. Intern. Med.*, 127:882-890, 1997.

Dean *et al.*, "Genetic restriction of HIV-1 infection and progression to AIDS by a deletion allele of the CKR5 structural gene," Hemophilia Growth and Development Study, Multicenter AIDS Cohort Study, Multicenter Hemophilia Cohort Study, San Francisco City Cohort, ALIVE Study, *Science*, 273:1856-1862, 1996 (Erratum published in *Science*, 274(5290):1069, 1996).

Deichmann *et al.*, "Expression of the human immunodeficiency virus type-1 coreceptors CXCR-4 (fusin, LESTR) and CKR-5 in CD34+ hematopoietic progenitor cells," *Blood*, 89(10):3522-3528, 1997.

Deng *et al.*, "Identification of a major co-receptor for primary isolates of HIV-1," *Nature*, 381(6584):661-666, 1996.

Deng *et al.*, "Expression cloning of new receptors used by simian and human immunodeficiency viruses," *Nature*, 388(6639):296-300, 1997.

Dillon *et al.*, "The effect of distance on long-range chromatin interactions," *Mol. Cell*, 1:131-139, 1997.

Dolan *et al.*, "Early markers of HIV infection and subclinical disease progression," *Vaccine*, 11:548-551, 1993.

WO 01/27330

PCT/US00/28158

- Dolan *et al.*, "In vitro T cell function, delayed-type hypersensitivity skin testing, and CD4+ T cell subset phenotyping independently predict survival time in patients infected with human immunodeficiency virus," *J. Infect. Dis.*, 172:79-87, 1995.
- Donald *et al.*, "Progression of HIV-related disease is associated with HLA DQ and DR alleles defined by restriction fragment length polymorphisms," *Tissue Antigens*, 39:241-248, 1992.
- Doranz *et al.*, "A dual-tropic primary HIV-1 isolate that uses fusin and the beta-chemokine receptors CKR-5, CKR-3, and CKR-2b as fusion cofactors," *Cell*, 85(7):1149-1158, 1996.
- Dragic *et al.*, "HIV-1 entry into CD4+ cells is mediated by the chemokine receptor CC- CKR-5," *Nature*, 381:667-673, 1996.
- Dragic *et al.*, *J. Virol.*, 72(1):279-285, 1998.
- D'Souza and Harden, "Chemokines and HIV-1 second receptors. Confluence of two fields generates optimism in AIDS research," *Nat. Med.*, 2:1293-1300, 1996.
- Edinger *et al.*, *Virology*, 249(2):367-378, 1998.
- Esposito *et al.*, "Role of CCR5 chemokine receptor gene in vertical human immunodeficiency virus type 1 transmission and disease progression," *Pediatr. Infect. Dis. J.*, 17:847-849, 1998.
- Eugen-Olsen *et al.*, "Heterozygosity for a deletion in the CKR-5 gene leads to prolonged AIDS-free survival and slower CD4 T-cell decline in a cohort of HIV- seropositive individuals," *AIDS*, 11:305-310, 1997.
- Eugen-Olsen *et al.*, "Chemokine receptor CCR2b 64I polymorphism and its relation to CD4 T-cell counts and disease progression in a Danish cohort of HIV-infected individuals," Copenhagen AIDS cohort, *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 18:110-116, 1998.
- Fabio *et al.*, "HLA-associated susceptibility to HIV-1 infection," *Clin. Exp. Immunol.*, 87:20-23, 1992.
- Farzan *et al.*, "HIV-1 entry and macrophage inflammatory protein-1beta-mediated signaling are independent functions of the chemokine receptor CCR5," *J. Biol. Chem.*, 272(11):6854-6857, 1997.
- Fauci, "Host factors and the pathogenesis of HIV-induced disease," *Nature*, 384(6609):529-534, 1996.
- Fauci, "Host factors in the pathogenesis of HIV disease," *Antibiot. Chemother.*, 48:4-12, 1996.
- Feng *et al.*, "HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor," *Science*, 272(5263):872-877, 1996.

WO 01/27330

PCT/US00/28158

Ferbas, "Perspectives on the role of CD8+ cell suppressor factors and cytotoxic T lymphocytes during HIV infection," *AIDS Res. Hum. Retroviruses*, 14(Suppl 2):S153-S160, 1998.

Fernandez-Reyes *et al.*, "A high frequency African coding polymorphism in the N-terminal domain of ICAM-1 predisposing to cerebral malaria in Kenya," *Hum. Mol. Genet.*, 6:1357-1360, 1997.

Fischl *et al.*, "The efficacy of azidothymidine (AZT) in the treatment of patients with AIDS and AIDS-related complex," *NEJM* 317:185-191, 1987.

Fischl *et al.*, "A randomized controlled trial of a reduced daily dose of Zidovudine in patients with the acquired immunodeficiency syndrome," *NEJM* 323:1009-1014, 1990.

Fleiss, In: *Statistical Methods for Rates and Proportions*, 2nd ed., New York, John Wiley & Sons., pp. 174, 1981.

Fomsgaard *et al.*, *Virology*, 182(1):397-402, 1991.

Fowke *et al.*, "Resistance to HIV-1 infection among persistently seronegative prostitutes in Nairobi, Kenya," *Lancet*, 348:1347-1351, 1996.

Freimer and Slatkin, "Microsatellites: evolution and mutational processes," *Ciba Found. Symp.*, 197:51-67, 1996.

Frohman, In: "PCR Protocols: A Guide To Methods And Applications", Academic Press, N.Y., 1990.

Furci *et al.*, "Antigen-driven C-C chemokine-mediated HIV-1 suppression by CD4(+) T cells from exposed uninfected individuals expressing the wild-type CCR- 5 allele," *J. Exp. Med.*, 186:455-460, 1997.

Furci *et al.*, "CD8+ T lymphocyte-derived chemokines and other HIV-suppressive factors: mini-review," *J. Chemother.*, 10:146-149, 1998.

Furman *et al.*, "Phosphorylation of 3'-azido-3'-deoxythymidine and selective interaction of the 5'-triphosphate with human immunodeficiency virus reverse transcriptase" *Proc. Natl. Acad. Sci. USA* 83:8333-8337, 1986.

Furman *et al.*, "Spectrum of antiviral activity and mechanism of action of Zidovudine," *Am. J. Med.* 85:176-181, 1988.

Gao *et al.*, "Origin of HIV-1 in the chimpanzee *Pan troglodytes troglodytes*," *Nature*, 397(6718):436-441, 1999.

Gardner and Luciw, *FASEB J.*, 3(14):2593-2606, 1989.

Garred *et al.*, "Dual effect of CCR5 delta 32 gene deletion in HIV-1-infected patients," Copenhagen AIDS Study Group, *Lancet*, 349(9069):1884, 1997.

Garred, "Chemokine-receptor polymorphisms: clarity or confusion for HIV-1 prognosis?," *Lancet*, 351:2-3, 1998.

WO 01/27330

PCT/US00/28158

- Garzino-Demo *et al.*, "Beta-chemokines and protection from HIV type 1 disease," *AIDS Res. Hum. Retroviruses*, 14(Suppl 2):S177-S184, 1998.
- Garzino-Demo *et al.*, "Chemokine receptors and chemokines in HIV infection," *J. Clin. Immunol.*, 18:243-255, 1998.
- Gerard *et al.*, "Human chemotaxis receptor genes cluster at 19q13.3-13.4. Characterization of the human C5a receptor gene," *Biochemistry*, 32(5):1243-1250, 1993.
- Glushakova *et al.*, "Evidence for the HIV-1 phenotype switch as a causal factor in acquired immunodeficiency," *Nat. Med.*, 4:346-349, 1998.
- Gojobori *et al.*, *Proc. Natl. Acad. Sci. USA*, 87(11):4108-4111, 1990.
- Goldstein and Pollock, "Launching microsatellites: a review of mutation processes and methods of phylogenetic interference," *J. Hered.*, 88:335-342, 1997.
- Gonzalez *et al.*, "True HIV-1 infection in a pygmy," *Lancet*, 1:1499, 1987.
- Goodman *et al.*, *Mol. Phylogenet. Evol.*, 9(3):585-598, 1998.
- Goodman, *Am. J. Hum. Genet.*, 64(1):31-39, 1999.
- Gosling *et al.*, "Molecular uncoupling of C-C chemokine receptor 5-induced chemotaxis and signal transduction from HIV-1 coreceptor activity," *Proc. Natl. Acad. Sci. USA*, 94(10):5061-5066, 1997.
- Granelli-Piperno *et al.*, "Efficient interaction of HIV-1 with purified dendritic cells via multiple chemokine coreceptors," *J. Exp. Med.*, 184(6):2433-2438, 1996.
- Granja *et al.*, "Population genetics and human leukocyte polymorphism," In: *Transplantation Biology: Cellular and Molecular Aspects*, Tilney *et al.*, Eds., 311-324, 1996.
- Graziosi *et al.*, "Immunopathogenesis of HIV infection," *AIDS Res. Hum. Retroviruses*, 14(Suppl 2):S135-S142, 1998.
- Guignard *et al.*, *J. Immunol.*, 160(2):985-992, 1998.
- Haffner *et al.*, "Hyperinsulinemia in a population at high risk for non-insulin-dependent diabetes mellitus," *N. Engl. J. Med.*, 315(4):220-224, 1986.
- Hendel *et al.*, "Distinctive effects of CCR5, CCR2, and SDF1 genetic polymorphisms in AIDS progression," *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 19:381-386, 1998.
- Hill, "HLA and infection," *J. R. Coll. Physicians Lond.*, 26:11-16, 1992.
- Hill, "Malaria resistance genes: a natural selection," *Trans. R. Soc. Trop. Med. Hyg.*, 86:225-226, 232, 1992b.
- Hill *et al.*, "Human leukocyte antigens and natural selection by malaria," *Philos. Trans. R. Soc. Lond. B. Biol. Sci.*, 346:379-385, 1994.



WO 01/27330

PCT/US00/28158

Hill, "Genetic susceptibility to malaria and other infectious diseases: from the MHC to the whole genome," *Parasitology*, 112:S75-S84, 1996.

Hill, "HIV and HLA: confusion or complexity?," *Nat. Med.*, 2:395-396, 1996.

Hill *et al.*, "Genetic analysis of host-parasite coevolution in human malaria," *Philos. Trans. R. Soc. Lond. B. Biol. Sci.*, 352:1317-1325, 1997.

Hill, "The immunogenetics of human infectious diseases," *Annu. Rev. Immunol.*, 16:593-617, 1998.

Hirashima *et al.*, "Nucleotide sequence of the third cytokine LD78 gene and mapping of all three LD78 gene loci to human chromosome 17," *DNA Seq.*, 3:203-212, 1992.

Hirsch *et al.*, *Nature*, 339(6223):389-392, 1989.

Hirsch *et al.*, *J. Virol.*, 73(2):1036-1045, 1999.

HIV/AIDS Surveillance Report CDC, "U.S. HIV and AIDS cases reported through June 1988," 10(1), 1998.

Hovanessian *et al.*, "Antiviral activity of Poly(A)•Poly(U) against HIV in vitro," *Intl. Conf. AIDS* 7:113 (abstract W.A.1084), 1991.

Hu *et al.*, "How important is race/ethnicity as an indicator of risk for specific AIDS-defining conditions?," *J Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 10:374-380, 1995.

Huang *et al.*, "The role of a mutant CCR5 allele in HIV-1 transmission and disease progression," *Nat. Med.*, 2(11):1240-1243, 1996.

Iannetti *et al.*, "HLA antigens, epilepsy and cytomegalovirus infection," *Brain Dev.*, 10:256-258, 1988.

Inoue *et al.*, "A nucleotide substitution in the promoter of human angiotensinogen is associated with essential hypertension and affects basal transcription in vitro," *J. Clin. Invest.*, 99(7):1786-1797, 1997.

Ioannidis *et al.*, "Genetic effects on HIV disease progression," *Nat. Med.*, 4:536, 1998.

Itescu *et al.*, "HLA-B35 is associated with accelerated progression to AIDS," *J. Acquir. Immune Defic. Syndr.*, 5:37-45, 1992.

Itescu *et al.*, "Certain HLA-DR5 and -DR6 major histocompatibility complex class II alleles are associated with a CD8 lymphocytic host response to human immunodeficiency virus type 1 characterized by low lymphocyte viral strain heterogeneity and slow disease progression," *Proc. Natl. Acad. Sci. USA*, 91:11472-11476, 1994.

Itescu *et al.*, "Grouping HLA-B locus serologic specificities according to shared structural motifs suggests that different peptide-anchoring pockets may have contrasting influences on the course of HIV-1 infection," *Hum. Immunol.*, 42:81-89, 1995.

WO 01/27330

PCT/US00/28158

- Iwamoto *et al.*, "Genomic organization of the glycoprotein D gene: Duffy blood group Fya/Fyb alloantigen system is associated with a polymorphism at the 44-amino acid residue," *Blood*, 85(3):622-626, 1995.
- Iwamoto *et al.*, "Identification of a novel exon and spliced form of Duffy mRNA that is the predominant transcript in both erythroid and postcapillary venule endothelium," *Blood*, 87(1):378-385, 1996.
- Izuta *et al.*, "The 5'-triphosphates of 3'-azido-3'-deoxythymidine and 2',3'-dideoxynucleosides inhibit DNA polymerase  $\gamma$  by different mechanisms," *Biochem. Biophys. Res. Comm.* 179:776-783, 1991.
- Jackson, *Cell*, 74:9-14, 1993.
- Jolly *et al.*, *J. Med. Primatol.*, 25(2):78-83, 1996.
- Jones *et al.*, "Trends in AIDS-related opportunistic infections among men who have sex with men and among injecting drug users, 1991-1996," *J. Infect. Dis.*, 178:114-120, 1998.
- Jorde *et al.*, *Am. J. Hum. Genet.*, 57(3):523-538, 1995.
- Jorde *et al.*, "Using mitochondrial and nuclear DNA markers to reconstruct human evolution," *Bioessays*, 20:126-136, 1998.
- Joyce *et al.*, "Variation in inpatient resource use in the treatment of HIV: do the privately insured receive more care?," *Med. Care*, 37:220-227, 1999.
- Just *et al.*, "Genetic risk factors for perinatally acquired HIV-1 infection," *Paediatr. Perinat. Epidemiol.*, 6:215-224, 1992.
- Just *et al.*, "Influence of host genotype on progression to acquired immunodeficiency syndrome among children infected with human immunodeficiency virus type 1," *J. Pediatr.*, 127:544-549, 1995.
- Just, "Genetic predisposition to HIV-1 infection and acquired immune deficiency virus syndrome: a review of the literature examining associations with HLA," [Erratum published in *Hum. Immunol.*, 45(1):78, 1996, *Hum. Immunol.*, 44:156-169, 1995.
- Kaloterakis *et al.*, "HLA in familial and nonfamilial Mediterranean Kaposi's sarcoma in Greece," *Tissue Antigens*, 45:117-119, 1995.
- Kaplan *et al.*, "HLA-associated susceptibility to acquired immune deficiency syndrome in HIV-1-seropositive subjects," *Hum. Hered.*, 40:290-298, 1990.
- Kaslow *et al.*, "A1, Cw7, B8, DR3 HLA antigen combination associated with rapid decline of T-helper lymphocytes in HIV-1 infection," A report from the Multicenter AIDS Cohort Study, *Lancet*, 335:927-930, 1990.
- Kaslow *et al.*, "Influence of combinations of human major histocompatibility complex genes on the course of HIV-1 infection," *Nat. Med.*, 2:405-411, 1996.

WO 01/27330

PCT/US00/28158

- Katzenstein *et al.*, "HIV-infected individuals with the CCR delta32/CCR5 genotype have lower HIV RNA levels and higher CD4 cell counts in the early years of the infection than do patients with the wild type," Copenhagen AIDS Cohort Study Group, *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 16:10-14, 1997.
- Kazazian, "The Thalassemia syndromes: molecular basis and prenatal diagnosis in 1990," *Sem. Hematol.*, 27(3):209-228, 1990.
- Keet *et al.*, "The role of host genetics in the natural history of HIV-1 infection: the needles in the haystack," *Aids*, 10:S59-S67, 1996.
- Klein *et al.*, "Associations between HLA frequencies and pathogenic features of human immunodeficiency virus type 1 infection in seroconverters from the Amsterdam cohort of homosexual men," *J. Infect. Dis.*, 169:1244-1249, 1994.
- Knight *et al.*, *Nat. Genet.*, 22(2):145-150, 1999.
- Koralnik *et al.*, "Phylogenetic associations of human and simian T-cell leukemia/lymphotropic virus type I strains: evidence for interspecies transmission," *J. Virol.*, 68:2693-2707, 1994.
- Kostrikis *et al.*, "A chemokine receptor CCR2 allele delays HIV-1 disease progression and is associated with a CCR5 promoter mutation," *Nat. Med.*, 4:350-353, 1998.
- Kostrikis *et al.*, "Spectral genotyping of human alleles," *Science*, 279:1228-1229, 1998.
- Kowo *et al.*, "Prevalence of hepatitis C virus and other blood-borne viruses in Pygmies and neighbouring Bantus in southern Cameroon," *Trans. R. Soc. Trop. Med. Hyg.*, 89:484-486, 1995.
- Kozak, *Proc. Natl. Acad. Sci. USA*, 83:2850-2854, 1986.
- Kozak, *J. Cell Biol.*, 108:229-241, 1989.
- Kozak, *J. Cell Biol.*, 115:887-903, 1991.
- Kurumbail *et al.*, "Structural basis for selective inhibition of cyclooxygenase-2 by anti-inflammatory agents," *Nature*, 384:644-648, 1996.
- Lacey *et al.*, "Biochemical studies on the reverse transcriptase and RNase H activities from human immunodeficiency virus strains resistant to 3'-azido-3'-deoxythymidine," *J. Biol. Chem.* 267:15789-15794, 1992.
- Lambert *et al.*, "2',3'-dideoxyinosine (ddI) in patients with the acquired immunodeficiency syndrome or AIDS-related complex," *NEJM* 322:1333-1340, 1990.
- Larder, "Inhibitors of HIV reverse transcriptase as antiviral agents and drug resistance." In *Reverse Transcriptase* (A. M. Skalka & S. P. Goff, ed.), Cold Spring Harbor Laboratory Press, Plainview, N.Y., pp. 205-222, 1993.
- Leen *et al.*, "Structural and functional analysis of HLA-DR beta-promoter polymorphism and isomorphism," *Hum. Immunol.*, 41(2):112-120, 1994.

- Levis and Penman, "The metabolism of poly (A)+ and poly(A)-hnRNA in cultured *Drosophila* cells studied with a rapid uridine pulse-chase," *Cell*, 11(1):105-113, 1977.
- Li *et al.*, *J. Med. Primatol.*, 18(3-4):261-269, 1989.
- Li and Sadler, *Genetics*, 129(2):513-523, 1991.
- Li *et al.*, "PU.1 is essential for p47phox promoter activity in myeloid cells," *J. Biol. Chem.*, 272(28):17802-17809, 1997.
- Libert *et al.*, "The *deltacr5* mutation conferring protection against HIV-1 in Caucasian populations has a single and recent origin in Northeastern Europe," *Hum. Mol. Genet.*, 7:399-406, 1998.
- Lifson *et al.*, "Early viral replication dynamics predict clinical course in SIV infected macaques," *4th Conf. Retro. and Opportun. Infect.*, 136, Abstract No. 390, January 22-26, 1997.
- Liu *et al.*, "Homozygous defect in HIV-1 coreceptor accounts for resistance of some multiply-exposed individuals to HIV-1 infection," *Cell*, 86(3):367-377, 1996.
- Liu *et al.*, "Divergent patterns of progression to AIDS after infection from the same source: human immunodeficiency virus type 1 evolution and antiviral responses," *J. Virol.*, 71:4284-4295, 1997.
- Liu *et al.*, *AIDS Res. Hum. Retroviruses*, 14(17):1509-1519, 1998.
- Liu *et al.*, "Polymorphism in RANTES chemokine promoter affects HIV-1 disease progression," *Proc. Natl. Acad. Sci. USA*, 96:4581-4585, 1999.
- Louie *et al.*, "Influence of host genotype on progression to AIDS among HIV-infected men," *J. Acquir. Immune Defic. Syndr.*, 4:814-818, 1991.
- Lu *et al.*, "Evolution of HIV-1 coreceptor usage through interactions with distinct CCR5 and CXCR4 domains," *Proc. Natl. Acad. Sci. USA*, 94(12):6426-6431, 1997.
- Lucotte, "Frequencies of the CC chemokine receptor 5 delta 32 allele in various populations of defined racial background," *Biomed. Pharmacother.*, 51:469-473, 1997.
- Ma *et al.*, "New thymidine triphosphate analogue inhibitors of human immunodeficiency virus-1 reverse transcriptase," *J. Med. Chem.* 35:1938-1941, 1992.
- Malnati *et al.*, "Increased plasma levels of the C-C chemokine RANTES in patients with primary HIV-1 infection," *J. Biol. Regul. Homeost. Agents*, 11:40-42, 1997.
- Mandl *et al.*, "Possible influence of the mutant CCR5 Allele on vertical transmission of HIV-1," *J. Med. Virol.*, 55:51-55, 1998.
- Mangano *et al.*, "Distribution of CCR-5 delta32 allele in Argentinian children at risk of HIV-1 infection: its role in vertical transmission," *AIDS*, 12:109-110, 1998.
- Mann *et al.*, "HLA antigen frequencies in HIV-1-related Kaposi's sarcoma," *J. Acquir. Immune Defic. Syndr.*, 3:S51-S55, 1990.

WO 01/27330

PCT/US00/28158

- Mann *et al.*, "HLA phenotype is a factor in determining rate of disease progression and outcome in HIV-1-infected individuals," *AIDS Res. Hum. Retroviruses*, 8:1345-1346, 1992.
- Mann *et al.*, "Major histocompatibility complex genotype is associated with disease progression and virus load levels in a cohort of human immunodeficiency virus type 1-infected Caucasians and African Americans," *J. Infect. Dis.*, 178:1799-1802, 1998.
- Martin *et al.*, "Genetic acceleration of AIDS progression by a promoter variant of CCR5," *Science*, 282(5395):1907-1911, 1998.
- Martinson *et al.*, "Global distribution of the CCR5 gene 32-basepair deletion," *Nat. Genet.*, 16(1):100-103, 1997.
- Masood *et al.*, "Cellular pharmacology of the anti-HIV agent 2',3'-dideohydro-2',3'-dideoxythymidine," *Proc. Amer. Assoc. Cancer Res.* 30:594 (abstract A2364), 1989.
- McDermott *et al.*, "CCR5 promoter polymorphism and HIV-1 disease progression," Multicenter AIDS Cohort Study (MACS), *Lancet*, 352(9131):866-870, 1998.
- McGuire *et al.*, "Variation in the TNF-alpha promoter region associated with susceptibility to cerebral malaria," *Nature*, 371(6497):508-510, 1994.
- McKnight and Palmiter, "Transcriptional regulation of the ovalbumin and conalbumin genes by steroid hormones in chick oviduct," *J. Biol. Chem.*, 254(18):9050-9058, 1979.
- McNeil *et al.*, "Association of HLA types A1-B8-DR3 and B27 with rapid and slow progression of HIV disease," *QJM*, 89:177-185, 1996.
- McNicholl *et al.*, "Host genes and HIV: the role of the chemokine receptor gene CCR5 and its allele," Erratum published in *Emerg. Infect. Dis.*, 3(4):584, 1997, *Emerg. Infect. Dis.*, 3:261-271, 1997.
- Mehra, "Role of HLA linked factors in governing susceptibility to leprosy and tuberculosis," *Trop. Med. Parasitol.*, 41:352-354, 1990.
- Mellors *et al.*, "Prognosis in HIV-1 infection predicted by the quantity of virus in plasma," erratum published in *Science*, 275(5296):14, 1997, *Science*, 272:1167-1170, 1996.
- Mellors *et al.*, "Plasma viral load and CD4+ lymphocytes as prognostic markers of HIV-1 infection," *Ann. Intern. Med.*, 126:946-954, 1997.
- Meng *et al.*, AIDS clinical trials group: Phase I/II study of combination 2',3'-dideoxycytidine and Zidovudine in patients with acquired immunodeficiency syndrome (AIDS) and advanced AIDS-related complex," *Am. J. Med.* 88:27S-30S, 1990.
- Messier and Stewart, *Nature*, 385(6612):151-154, 1997.
- Meyer *et al.*, "Early protective effect of CCR-5 delta 32 heterozygosity on HIV-1 disease progression: relationship with viral load," The SEROCO Study Group, *AIDS*, 11:F73-F78, 1997.

WO 01/27330

PCT/US00/28158

- Michael *et al.*, "The role of CCR5 and CCR2 polymorphisms in HIV-1 transmission and disease progression," *Nat. Med.*, 3(10):1160-1162, 1997a.
- Michael *et al.*, "The role of viral phenotype and CCR-5 gene defects in HIV-1 transmission and disease progression," *Nat. Med.*, 3(3):338-340, 1997b.
- Misrahi *et al.*, "CCR5 chemokine receptor variant in HIV-1 mother-to-child transmission and disease progression in children," French Pediatric HIV Infection Study Group. *Jama*, 279:277-280, 1998.
- Mitsuya *et al.*, "3'-Azido-3'-deoxythymidine (BW A509U): An antiviral agent that inhibits the infectivity and cytopathic effect of human T-lymphotropic virus type III/lymphadenopathy-associated virus in vitro," *Proc. Natl. Acad. Sci. USA* 82:7096-7100, 1985.
- MMWR Morb. Mortal Wkly Rep., "Revised classification for HIV-1 infection in children," *MMWR Morb. Mortal Wkly Rep.* 43:1-10, 1994.
- Moore *et al.*, "Co-receptors for HIV-1 entry," *Curr. Opin. Immunol.*, 9:551-562, 1997.
- Moore, "Coreceptors: implications for HIV pathogenesis and therapy," *Science*, 276:51-52, 1997.
- Morawetz *et al.*, "Genetic polymorphism of CCR5 gene and HIV disease: the heterozygous (CCR5/delta ccr5) genotype is neither essential nor sufficient for protection against disease progression," Swiss HIV Cohort, *Eur. J. Immunol.*, 27:3223-3227, 1997.
- Moriuchi *et al.*, "CD8+ T-cell-derived soluble factor(s), but not beta-chemokines RANTES, MIP-1 alpha, and MIP-1 beta, suppress HIV-1 replication in monocyte/macrophages," *Proc. Natl. Acad. Sci. USA*, 93:15341-15345, 1996.
- Moriuchi *et al.*, "Nuclear factor-kappa B potently up-regulates the promoter activity of RANTES, a chemokine that blocks HIV infection," *J. Immunol.*, 158:3483-3491, 1997.
- Moriuchi *et al.*, *J. Immunol.*, 159(11):5441-5449, 1997.
- Murphy *et al.*, "Sequence and organization of the human N-formyl peptide receptor-encoding gene," *Gene*, 133(2):285-290, 1993.
- Murphy, "Chemokine receptors: structure, function and role in microbial pathogenesis," *Cytokine Growth Factor Rev.*, 7(1):47-64, 1996.
- Murphy, *Annu. Rev. Immunol.*, 12:593-633, 1994.
- Mutoh *et al.*, "Two different promoters direct expression of two distinct forms of mRNAs of human platelet-activating factor receptor," *FEBS Lett.*, 322(2):129-134, 1993.
- Naganawa *et al.*, "Intestinal transcription and synthesis of apolipoprotein AI is regulated by five natural polymorphisms upstream of the apolipoprotein CIII gene," *J. Clin. Invest.*, 99(8):1958-1965, 1997.

WO 01/27330

PCT/US00/28158

- Nakao *et al.*, "Structures of human genes coding for cytokine LD78 and their expression," *Mol. Cell Biol.*, 10:3646-3658, 1990.
- Ndumbe *et al.*, "Infections among pygmies in the Eastern Province of Cameroon," *Med. Microbiol. Immunol.*, 182:281-284, 1993.
- Nei and Gojobori, *Mol. Biol. Evol.*, 3(5):418-426, 1986.
- Nelson *et al.*, "Genomic organization and transcriptional regulation of the RANTES chemokine gene," *J. Immunol.*, 151:2601-2612, 1993.
- Nelson *et al.*, "Frequency of HLA allele-specific peptide motifs in HIV-1 proteins correlates with the allele's association with relative rates of disease progression after HIV-1 infection," *Proc. Natl. Acad. Sci. USA*, 94:9802-9807, 1997.
- Nibbs *et al.*, *J. Biol. Chem.*, 272:12495-12504, 1997.
- Nomiyama *et al.*, "Characterization of cytokine LD78 gene promoters: positive and negative transcriptional factors bind to a negative regulatory element common to LD78, interleukin-3, and granulocyte-macrophage colony-stimulating factor gene promoters," *Mol. Cell Biol.*, 13:2787-2801, 1993.
- Oberlin *et al.*, "The CXC chemokine SDF-1 is the ligand for LESTR/fusin and prevents infection by T-cell-line-adapted HIV-1," *Nature*, 382(6594):833-835, 1996 (Erratum published in *Nature*, 384(6606):288, 1996).
- O'Brien *et al.*, "HIV-1 infection in a man homozygous for CCR5 delta 32," *Lancet*, 349(9060):1219, 1997.
- Oliveira and McCarthy, *J. Biol. Chem.*, 270:8936-8943, 1995.
- Olsen *et al.*, "Interaction of HIV1-RT with azidothymidine triphosphate and the nonnucleoside inhibitor L-697, 661," *Int. Conf. AIDS 7:A45* (abstract PoA 2255), 1992.
- Oravec *et al.*, "Beta-chemokine inhibition of monocytotropic HIV-1 infection. Interference with a postbinding fusion step," *J. Immunol.*, 157:1329-1332, 1996.
- Orkin, "Transcription factors and hematopoietic development," *J. Biol. Chem.*, 270(10):4955-4958, 1995.
- Pang *et al.*, "Functional characterization of the promoter region of the platelet-activating factor receptor gene. Identification of an initiator element essential for gene expression in myeloid cells," *J. Biol. Chem.*, 270(23):14123-14129, 1995.
- Papasteriades *et al.*, "Histocompatibility antigens HLA-A, -B, -DR in Greek patients with Kaposi's sarcoma," *Tissue Antigens*, 24:313-315, 1984.
- Parker *et al.*, "Inhibition of human DNA polymerases and human immunodeficiency virus (HIV) reverse transcriptase by a novel class of compounds, galloylquinic acids," *Proc. Amer. Assoc. Cancer Res.* 30:578 (abstract 2301), 1989.

WO 01/27330

PCT/US00/28158

- Parker *et al.*, "Mechanism of inhibition of human immunodeficiency virus type 1 reverse transcriptase and human DNA polymerases  $\alpha$ ,  $\beta$ , and  $\gamma$  by the 5'-triphosphates of Carbovir, 3'-azido-3'-deoxythymidine, 2',3'-dideoxyguanosine, and 3'-deoxythymidine," *J. Biol. Chem.* 266:1754-1762, 1991.
- Parola and Kobilka, *J. Biol. Chem.*, 269:4497-4505, 1994.
- Paxton *et al.*, "Relative resistance to HIV-1 infection of CD4 lymphocytes from persons who remain uninfected despite multiple high-risk sexual exposure," *Nat. Med.*, 2:412-417, 1996a.
- Paxton *et al.*, "The beta-chemokines, HIV type 1 second receptors, and exposed uninfected persons," *AIDS Res. Hum. Retroviruses*, 12:1203-1207, 1996b.
- Paxton and Koup, "Mechanisms of resistance to HIV infection," *Springer Semin. Immunopathol.*, 18:323-340, 1997.
- Paxton *et al.*, "Reduced HIV-1 infectability of CD4+ lymphocytes from exposed-uninfected individuals: association with low expression of CCR5 and high production of beta-chemokines," *Virology*, 244:66-73, 1998.
- Paxton *et al.*, "The HIV type 1 coreceptor CCR5 and its role in viral transmission and disease progression," *AIDS Res. Hum. Retroviruses*, 14(Suppl 1):S89-S92, 1998.
- Peckham and Gibb, "Mother-to-child transmission of the human immunodeficiency virus" *N. Engl. J. Med.*, 333:298-302, 1995.
- Pei-Zhen *et al.*, "An in vitro EIAV RT model for screening of anti-HIV agents", *Intl. Conf. AIDS* 5:501 (abstract B.626), 1989.
- Peterson and Baichwal, "Transcription factor based therapeutics: drugs of the future?," *Trends Biotechnol.*, 11(1):11-18, 1993.
- Philpott *et al.*, "CCR5 genotype and resistance to vertical transmission of HIV-1," *J. Acquir. Immune Defic. Syndr.*, 21:189-193, 1999.
- Piatek *et al.*, "Molecular beacon sequence analysis for detecting drug resistance in *Mycobacterium tuberculosis*," *Nat. Biotechnol.*, 16:359-363, 1998.
- Picchio *et al.*, "Chemokine receptor CCR5 genotype influences the kinetics of human immunodeficiency virus type 1 infection in human PBL-SCID mice," *J. Virol.*, 71(9):7124-7127, 1997.
- Prestridge, *CABIOS*, 7:203-206, 1991.
- Puppo *et al.*, "Major histocompatibility gene products and human immunodeficiency virus infection," *J. Lab. Clin. Med.*, 117:91-100, 1991.
- Quandt *et al.*, *Nucl. Acids Res.*, 23:4878-4884, 1995.



WO 01/27330

PCT/US00/28158

- Quillent *et al.*, "HIV-1-resistance phenotype conferred by combination of two separate inherited mutations of CCR5 gene," *Lancet*, 351:14-18, 1998.
- Raport *et al.*, "Molecular cloning and functional characterization of a novel human CC chemokine receptor (CCR5) for RANTES, MIP-1beta, and MIP-1alpha," *J. Biol. Chem.*, 271(29):17161-17166, 1996.
- Reardon, "Human immunodeficiency virus reverse transcriptase; Steady-state and pre-steady-state kinetics of nucleotide incorporation," *Biochemistry* 31:4473-4479, 1992.
- Remington's Pharmaceutical Sciences*, 15th Ed., Mack Publishing Company, 1975.
- Ressing *et al.*, "Immunotherapy of cancer by peptide-based vaccines for the induction of tumor-specific T cell immunity," *Immunotechnology*, 2:241-251, 1996a.
- Ressing *et al.*, "Occasional memory cytotoxic T-cell responses of patients with human papillomavirus type 16-positive cervical lesions against a human leukocyte antigen-A\*0201-restricted E7-encoded epitope," *Cancer Res.*, 56:582-588, 1996b.
- Rey-Cuille *et al.*, *J. Virol.*, 72(5):3872-3886, 1998.
- Rizzardi *et al.*, "CCR2 polymorphism and HIV disease," Swiss HIV Cohort. *Nat. Med.*, 4:252-253, 1998.
- Rodgers *et al.*, "Measurement of mRNA concentration and mRNA half-life as a function of hormonal treatment," *Methods Enzymol.*, 109:572-592, 1985.
- Roger, "Influence of host genes on HIV-1 disease progression," *FASEB J.*, 12:625-632, 1998.
- Rosenberg and Walker, "HIV type 1-specific helper T cells: a critical host defense," *AIDS Res. Hum. Retroviruses*, 14(Suppl 2):S143-S147, 1998.
- Rousseau *et al.*, "CCR5del32 in perinatal HIV-1 infection," *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 16:239-242, 1997.
- Rowland-Jones *et al.*, "HIV-specific cytotoxic T-cells in HIV-exposed but uninfected Gambian women," Erratum published in *Nat. Med.*, 1(6):598, 1995, *Nat. Med.*, 1:59-64, 1995.
- Royce *et al.*, "Sexual transmission of HIV," *N. Engl. J. Med.*, 336:1072-1078, 1997.
- Rucker *et al.*, "Regions in beta-chemokine receptors CCR5 and CCR2b that determine HIV-1 cofactor specificity," *Cell*, 87(3):437-446, 1996.
- Saah *et al.*, "Association of HLA profiles with early plasma viral load, CD4+ cell count and rate of progression to AIDS following acute HIV-1 infection," Multicenter AIDS Cohort Study, *Aids*, 12:2107-2113, 1998.
- Saini *et al.*, "Molecular events regulating messenger RNA stability in eukaryotes," *Mol. Cell Biochem.*, 96(1):15-23, 1990.
- Saitou and Nei, *Mol. Biol. Evol.*, 4(4):406-425, 1987.

WO 01/27330

PCT/US00/28158

- Saksena *et al.*, "Seroepidemiologic, molecular, and phylogenetic analyses of simian T- cell leukemia viruses (STLV-I) from various naturally infected monkey species from central and western Africa," *Virology*, 198:297-310, 1994.
- Sambrook *et al.*, *Molecular Cloning - A Laboratory Manual*, Cold Spring Harbor Laboratory Press, 1989.
- Samson *et al.*, "Molecular cloning and functional expression of a new human CC-chemokine receptor gene," *Biochemistry*, 35(11):3362-3367, 1996.
- Samson *et al.*, "Resistance to HIV-1 infection in caucasian individuals bearing mutant alleles of the CCR-5 chemokine receptor gene," *Nature*, 382(6593):722-725, 1996.
- Samson *et al.*, *Genomics*, 36:522-526, 1996.
- Scarlatti *et al.*, "In vivo evolution of HIV-1 co-receptor usage and sensitivity to chemokine-mediated suppression," *Nat. Med.*, 3:1259-1265, 1997.
- Schacker *et al.*, "Biological and virologic characteristics of primary HIV infection," *Ann. Intern. Med.*, 128:613-620, 1998.
- Schlotterer, "Genome evolution: are microsatellites really simple sequences?," *Curr. Biol.*, 8:R132-R134, 1998.
- Schmidtayerova *et al.*, "Chemokines and HIV replication," *Nature*, 382:767, 1996.
- Schneider *et al.*, "Arlequin: A software for population genetic data analysis. Ver 1.1.," Genetics and Biometry Lab, Dept. of Anthropology, University of Geneva, 1997.
- Schwoebel *et al.*, "Factors associated with extrapulmonary tuberculosis as an AIDS-defining disease in Europe," The Coordinators of AIDS surveillance in Austria, Belgium, France, Germany, Italy, Portugal, Switzerland, United Kingdom and the city of Amsterdam, *Tuber. Lung Dis.*, 76:281-285, 1995.
- Shafer and Edlin, "Tuberculosis in patients infected with human immunodeficiency virus: perspective on the past decade," *Clin. Infect. Dis.*, 22:683-704, 1996.
- Shearer and Clerici, "Protective immunity against HIV infection: has nature done the experiment for us?" *Immunol. Today*, 17:21-24, 1996.
- Shearer and Clerici, "Cytokine profiles in HIV type 1 disease and protection," *AIDS Res. Hum. Retroviruses*, 14(Suppl 2):S149-S152, 1998.
- Shearer *et al.*, "CCR5 HIV-1 vertical transmission," Women and Infants Transmission Study Group. *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 17:180-181, 1998.
- Shirasaka *et al.*, "In vitro study of drug-sensitivity of HIV strains isolated from patients with AIDS or ARC before and after therapy with AZT and/or 2',3'-dideoxycytidine (ddC)," *Intl. Conf. AIDS* 6:185 (abstract Th.A.263), 1990.
- Simmons *et al.*, "Potent inhibition of HIV-1 infectivity in macrophages and lymphocytes by a novel CCR5 antagonist," *Science*, 276(5310):276-279, 1997.

WO 01/27330

PCT/US00/28158

- Skowron *et al.*, "Alternating and intermittent regimens of Zidovudine and dideoxycytidine in patients with AIDS or AIDS-related complex," *Ann. Int. Med.* 118:321-330, 1993.
- Sloan *et al.*, "Single base pair substitutions within the HLA-DRA gene promoter separate the functions of the X1 and X2 boxes," *J. Immunol.*, 148(8):2591-2599, 1992.
- Smale and Baltimore, *Cell*, 57:103-113, 1989.
- Smith *et al.*, "Contrasting genetic influence of CCR2 and CCR5 variants on HIV-1 infection and disease progression," Hemophilia Growth and Development Study (HGDS), Multicenter AIDS Cohort Study (MACS), Multicenter Hemophilia Cohort Study (MHCS), San Francisco City Cohort (SFCC), ALIVE Study. *Science*, 277(5328):959-965, 1997.
- Song *et al.*, "Polymorphic nucleotides within the human IL-4 promoter that mediate overexpression of the gene," *J. Immunol.*, 156(2):424-429, 1996.
- Sozzani *et al.*, "Migration of dendritic cells in response to formyl peptides, C5a, and a distinct set of chemokines," *J. Immunol.*, 155(7):3292-3295, 1995.
- Speck *et al.*, "Selective employment of chemokine receptors as human immunodeficiency virus type 1 coreceptors determined by individual amino acids within the envelope V3 loop," *J. Virol.*, 71(9):7136-7139, 1997.
- Sperling *et al.*, "Maternal viral load, zidovudine treatment, and the risk of transmission of human immunodeficiency virus type 1 from mother to infant," Pediatric AIDS Clinical Trials Group Protocol 076 Study Group. *N. Engl. J. Med.*, 335:1621-1629, 1996.
- Spijkerman *et al.*, "Differences in progression to AIDS between injection drug users and homosexual men with documented dates of seroconversion," *Epidemiology*, 7:571-577, 1996.
- Steel *et al.*, "HLA haplotype A1 B8 DR3 as a risk factor for HIV-related disease," *Lancet*, 1:1185-1188, 1988.
- Steinman, "The dendritic cell system and its role in immunogenicity," *Annu. Rev. Immunol.*, 9:271-296, 1991.
- Steinman *et al.*, "Dendritic cells: antigen presentation, accessory function and clinical relevance," *Adv. Exp. Med. Biol.*, 329:1-9, 1993.
- Stephens *et al.*, "Dating the origin of the CCR5-Delta32 AIDS-resistance allele by the coalescence of haplotypes," *Am. J. Hum. Genet.*, 62:1507-1515, 1998.
- Stern *et al.*, "Lack of awareness and treatment of hyperlipidemia in type II diabetes in a community survey," *JAMA*, 262(3):360-364, 1989.
- Swofford, "PAUP:Phylogenetic analysis using parsimony, Version 3.1," Computer program distributed by the Illinois Natural History Survey, Champaign, Illinois, 1993.
- Takahata and Satta, *Proc. Natl. Acad. Sci. USA*, 94(9):4811-4815, 1997.

WO 01/27330

PCT/US00/28158

Tavares *et al.*, "3'-Azido-3'-deoxythymidine in feline leukemia virus-infected cats: A model for therapy and prophylaxis of AIDS," *Cancer Res.* 47:3190-3194, 1987.

The Working Group on Mother- To-Child Transmission of HIV, "Rates of mother-to-child transmission of HIV-1 in Africa, America, and Europe: results from 13 perinatal studies," *J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.*, 8:506-510, 1995.

Theodorou *et al.*, "HIV-1 infection in an individual homozygous for CCR5 delta 32," Seroco Study Group, *Lancet*, 349(9060):1219-1220, 1997.

Tomlinson and Bodmer, "The HLA system and the analysis of multifactorial genetic disease," *Trends Genet.*, 11:493-498, 1995.

Tournamille *et al.*, "Disruption of a GATA motif in the Duffy gene promoter abolishes erythroid gene expression in Duffy-negative individuals," *Nat. Genet.*, 10:224-228, 1995.

Trkola *et al.*, "CD4-dependent, antibody-sensitive interactions between HIV-1 and its co-receptor CCR-5," *Nature*, 384(6605):184-187, 1996.

Tyagi and Kramer, "Molecular beacons: probes that fluoresce upon hybridization," *Nat. Biotechnol.*, 14:303-308, 1996.

Tyagi *et al.*, "Multicolor molecular beacons for allele discrimination," *Nat. Biotechnol.*, 16:49-53, 1998.

Unutmaz *et al.*, "G protein-coupled receptors in HIV and SIV entry: new perspectives on lentivirus-host interactions and on the utility of animal models," *Semin. Immunol.*, 10(3):225-236, 1998.

Van de Perre, "Mother-to-child transmission of HIV-1: the 'all mucosal' hypothesis as a predominant mechanism of transmission," *AIDS*, 13:1133-1138, 1999.

van Rij *et al.*, "Role of CCR2 genotype in the clinical course of syncytium-inducing (SI) or non-SI human immunodeficiency virus type 1 infection and in the time to conversion to SI virus variants," *J. Infect. Dis.*, 178:1806-1811, 1998.

van Rij *et al.*, "The role of a stromal cell-derived factor-1 chemokine gene variant in the clinical course of HIV-1 infection," *AIDS*, 12:F85-F90, 1998.

Versaw *et al.*, "Mitogen-activated protein kinases enhance long-range activation by the beta-globin locus control region," *Proc. Natl. Acad. Sci. USA*, 95:8756-8760, 1998.

Vrang *et al.*, "Inhibition of the reverse transcriptase from HIV by 3'-azido-3'-deoxythymidine triphosphate and its threo analogue," *Antiviral Res.* 7:139-149, 1987.

Wainberg *et al.*, "Characterization of AZT-resistant isolates of HIV-1: Susceptibility to deoxythiacytidine and other nucleosides," *Intl. Conf. AIDS* 6:117 (abstract S.B.87), 1990.

Weatherall, "The genetics of common diseases: the implications of population variability," *Ciba Found Symp.*, 197:300-308, 1996a.

Weatherall, "Host genetics and infectious disease," *Parasitology*, 112:S23-S29, 1996b.

Weatherall *et al.*, "The role of genomics in studying genetic susceptibility to infectious disease," *Genome Res.*, 7:967-973, 1997.

Westby *et al.*, "The role of host immune responses in determining the outcome of HIV infection," *Immunol. Today*, 17:120-126, 1996.

White *et al.*, "Mechanism of inhibition by Carbovir triphosphate of HIV reverse transcriptase and human DNA polymerases, compared with the action of AZT triphosphate and dideoxynucleoside triphosphates," *Intl. Conf. AIDS* 6:186 (abstract Th.A.266), 1990.

White *et al.*, "A TIBO derivative, R82913, is a potent inhibitor of HIV-1 reverse transcriptase with heteropolymer templates," *Antiviral Res.* 16:257-266, 1991.

Winkler *et al.*, "Genetic restriction of AIDS pathogenesis by an SDF-1 chemokine gene variant," ALIVE Study, Hemophilia Growth and Development Study (HGDS), Multicenter AIDS Cohort Study (MACS), Multicenter Hemophilia Cohort Study (MHCS), San Francisco City Cohort (SFCC). *Science*, 279:389-393, 1998.

Wong *et al.*, "Organization and differential expression of the human monocyte chemoattractant protein 1 receptor gene. Evidence for the role of the carboxyl-terminal tail in receptor trafficking," *J. Biol. Chem.*, 272(2):1038-1045, 1997.

Wu *et al.*, "CCR5 levels and expression pattern correlate with infectability by macrophage-tropic HIV-1, *in vitro*," *J. Exp. Med.*, 185(9):1681-1691, 1997.

Yang and Nielsen, *J. Mol. Evol.*, 46(4):409-418, 1998.

Yang, *Comput. Appl. Biosci.*, 13(5):555-556, 1997.

Yarchoan *et al.*, "Administration of 3'-azido-3'-deoxythymidine, an inhibitor of HTLV-III/LAV replication, to patients with AIDS or AIDS-related complex," *Lancet* 1(8481):575-580, 1986.

Yu, Bowden, Spray, Rich and Freedman, *Hypertension* 31:906-911, 1998.

Zagury *et al.*, "C-C chemokines, pivotal in protection against HIV type 1 infection," *Proc. Natl. Acad. Sci. U S A*, 95:3857-3861, 1998.

Zhang *et al.*, "Use of coreceptors other than CCR5 by non-syncytium-inducing adult and pediatric isolates of human immunodeficiency virus type 1 is rare *in vitro*," *J. Virol.*, 72:9337-9344, 1998.

Zimmerman *et al.*, "Inherited resistance to HIV-1 conferred by an inactivating mutation in CC chemokine receptor 5: studies in populations with contrasting clinical phenotypes, defined racial background, and quantified risk," *Mol. Med.*, 3(1):23-36, 1997.

Zuker, *Science*, 244:48-52, 1989.